



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,019	06/30/2003	Janne Jalkanen	4208-4134	1916
27123	7590	03/10/2005	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			TSEGAYE, SABA	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/608,019	Applicant(s) JALKANEN ET AL.	
	Examiner Saba Tsegaye	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06/30/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 06/30/2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each **non-patent literature publication** or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 4, the phrase "the Internet" lacks antecedent basis.

In claim 15, line 2, the phrases " the terminal" and "the re-transmission" lack antecedent basis.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 19-24, 28-33, 35 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Ramamurthy et al. (US 6,853,294).

Regarding claim 1, Ramamurthy discloses, in Figs. 2 and 3, a Transponder for an RFID system, comprising:

- a) a substrate including RF receiving and transmitting means (44) (column 5, lines 10-21);
- b) data storage means storing packetized data in data formats transportable in the Internet (column 5, line 65-column 6, line 14; column 7, lines 11-20); and
- c) identifying code in the format identifying the data format (column 7, lines 40-55).

Regarding claim 2, Ramamurthy discloses the transponder of Claim 1 further comprising:

- d) signal means responsive to an activation signal for transmitting or receiving and storing packetized data (column 7, lines 20-35).

Art Unit: 2662

Regarding claim 3, Ramamurthy discloses the transponder of Claim 2 wherein the data formats are UDP and 1P, alone or in combination (column 4, lines 20-32).

Regarding claims 19 and 36, Ramamurthy discloses, in Figs. 2 and 3, a method for routing packetized data between a data carrier and destination address comprising:

a) receiving and sending a data packet from and to the data carrier (50) (column 6, line 54-column 7, line 10);

b) identifying a format of the data packet (column 7, lines 40-55);

c) processing the data packet according to the identified format (column 7, lines 11-55);

and

d) routing the processed data packet to a destination address (column 7, lines 40-55).

Regarding claims 20 and 28, Ramamurthy disclose the method wherein the data packet comprises an identification data, a header data and a payload data (column 4, lines 21-32).

Regarding claim 21, Ramamurthy discloses the method wherein the data packet without identification data is transportable in the Internet (column 7, lines 29-33).

Regarding claims 22 and 32, Ramamurthy discloses the method wherein the data carrier is an RFID tag (see fig. 3, RFID tag 50).

Art Unit: 2662

Regarding claim 23, Ramamurthy discloses the method wherein the destination address is an Internet address or an IP protocol port or both (column 7, lines 23-29).

Regarding claim 24, Ramamurthy discloses the method wherein the header data is UDP header data (column 4, lines 21-32).

Regarding claim 29, Ramamurthy discloses the method wherein the header data is standard IP protocol packet header data (column 4, lines 21-32).

Regarding claim 30, Ramamurthy discloses the method wherein the routed packets can be directed to a network or an application within the device (column 6, lines 26-35).

Regarding claim 31, Ramamurthy discloses the method wherein the network can be an external network (e.g. the internet) or a local network (such as a personal area network, or a local area network) (column 6, lines 26-35).

Regarding claim 33, Ramamurthy discloses, in Figs 1-3 and 5, a system for routing packetized data comprising:

a) at least one data carrier (RFID tag 50) having at least one data packet embedded therein;

Art Unit: 2662

b) a data receiving (reading) device or data sending (writing) device (RFID reader 40) for receiving or sending the at least one embedded data packet from the said at least one data carrier (column 6, line 54-column 7, line 11);

c) a data routing device (server 22) connectable to the data-receiving device (40) for routing the received data packet to a destination address (column 4, lines 2-11; column 7, lines 51-55); and application receiving the routed data packet (column 3, lines 55-61).

Regarding claim 35, Ramamurthy discloses the method wherein the at least one data packet is transportable in Internet (column 3, lines 34-39).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 25-27 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramamurthy et al.

Ramamurthy discloses all the claim limitation as stated above except for wherein the packetized data at least partly compressed and wherein the processing comprises decompressing received header data.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a system that compresses and decompresses data to the automated data collection system of Ramamurthy. One of ordinary skill in the art would have been motivated to do this because it reduces transmission time or capacity by eliminating long strings of identical bits or bits that do not change in successive sampling intervals.

8. Claims 5-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramamurthy et al. in view of Gershman et al. (US 6,705,522 B2).

Regarding claims 5 and 11, Ramamurthy discloses, in Figs. 2 and 3, a RFID system, comprising:

a) signal apparatus (40) transmitting activation signals and sending/receiving packetized datagrams transportable in the Internet to/from at least one transponder (50) (column 5, lines 10-39; line 65-column 6, line 14);

b) a communication protocol stack processing and routing packetized datagrams within the device or to a network (column 5, line 40-column 6, line 14);

c) stored programs operating the device in the RFID system and implementing communications within network (column 4, line 60-column 5, line 10; column 6, lines 15-41);
and

d) reading apparatus processing packetized datagrams from a transponder (column 5, lines 40-64).

Further, Ramamurthy discloses that the RFID reader 40 may communicate over an RF with server computer 22. however, Ramamurthy does not disclose a mobile device.

Art Unit: 2662

Gershman teaches a mobile transceiver unit that transmits and receives to/from RFID tag 204.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute mobile device, such as that suggested by Gershman, to the RFID reader of Ramamurthy. One of ordinary skill in the art would have been motivated to do this because mobile device allows reducing the number of fixed RFID readers.

Regarding claim 6, Ramamurthy discloses the mobile device of Claim 5 further comprising:

e) at least one application stored in the device and responsive to the packetized data (column 6, lines 15-41).

Regarding claims 7, 8, 10 and 18, Ramamurthy discloses wherein the packetized datagram is in UDP or IP or combined UDP/IP format including a header (column 4, lines 21-32). Ramamurthy does not disclose the header with at least partly compressed or shortened or omitted fields and decompressing or expanding header.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add a system that compresses and decompresses data to the automated data collection system of Ramamurthy. One of ordinary skill in the art would have been motivated to do this because it reduces transmission time or capacity by eliminating long strings of identical bits or bits that do not change in successive sampling intervals.

Art Unit: 2662

Regarding claim 9, Ramamurthy discloses parsing means processing datagrams for transmission to the network (column 4, lines 21-32).

Regarding claim 12, Ramamurthy discloses the RFID system wherein the reader (40) is located in the network (see Fig. 1).

Regarding claim 13, Ramamurthy discloses the RFID system wherein the communication protocol stack checks a checksum in the packetized datagram against the packet contents and notifies the reader the transmission has failed if the checksum is not valid (column 7, lines 12-39).

Regarding claim 14, Ramamurthy discloses the RFID system wherein the communication protocol stack requests a re-transmission from the transponder if the checksum is not valid (column 7, lines 4-11).

Regarding claim 15, Ramamurthy discloses that the reader 40 makes a determination as to whether a detected response was valid. If the response is determined to be not valid, the reader 40 transmits another interrogation field on a periodic basis. However, Ramamurthy does not expressly disclose dropping the packetized datagram if the retransmission is unsuccessful.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that drops the packetized datagram if the retransmission is unsuccessful to the retransmission method of Ramamurthy. One of ordinary skill in the art would have been motivated to do this because it would avoid endless re-transmission loops.

Art Unit: 2662

Regarding claim 16, Ramamurthy discloses the RFID system wherein the communication protocol stack transmits the packetized datagram to an application running in the terminal or to an application running in the network (column 7, lines 12-39).

Regarding claim 17, Ramamurthy discloses the RFID system wherein the communication protocol stack parses a header in the packetized datagram and routes the packetized datagram to a destination identified in the header if a checksum in the packetized datagram is valid (column 7, lines 12-39).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lane et al. (US 2004/0100363 A1) discloses a RFID device and method of use for certification and authentication.

Rakers et al. (US 6,763,996 B2) discloses a method of communication in a RFID system.

Berardi et al. (US 2004/0049451 A1) discloses a system and method for payment using RFID.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

Art Unit: 2662

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST
February 28 2005



JOHN PEZZLO
PRIMARY EXAMINER